DCCUMENT RESUME

ED 034 053 08p VT 009 688

AUTHOR	Icudermilk, Kenneth M.
TITLE	Idahc Research Coordinating Unit fcr Vccaticnal Educaticn. Final Repcrt.
INSTITUTICN	Idahc Cccupational Research Cocrdinating Unit, Mcsccw.
Spcns Agency	Cffice of Education (DHEW), Washington, D.C. Bureau cf Research.
Bureau Nc	ER-6-3014
Pub Date	Aug 69
Grant	CEG-4-7-063014-1590
Note	21p.
EDRS Price	EDRS Price MF-$0.25 HC-$1.15
Descriptcrs	*Research Coordinating Units, *Research Prcjects, *Vccaticnal Education, Workshops
Identifiers	*Idahc

Abstract

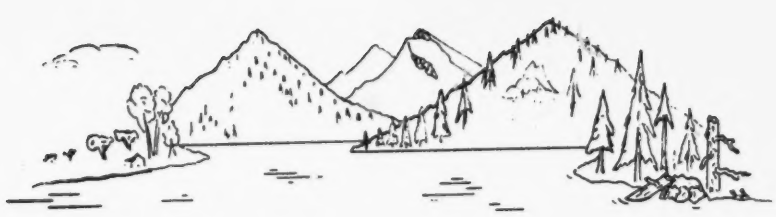
This final report for the Idahc Research Cocrdinating Unit fcr Vccaticnal Education which covers the last 11 mcnths since the last interim report has implicaticns fcr past acccmplishments and the future cutlcck cf the unit. The major purpcse of the unit was tc help maintain and develcp all prcgrams cf vccaticnal education in Idahc by conducting, coordinating, and stimulating research and by prcviding research consulting services. The unit engaged in 18 research prcjects, the results of which were repcrted in 20 research publications. Several ccnferences and wcrkshops were held, the most important of which was a wcrkshcp fcr training in methods cf vccaticnal research. Reccmmendaticns ccncerning the role and functicns cf the unit are discussed. Fcr a variety of reasons, but primarily due tc the shcrtage and uncertainty of research funds, the unit will be moved frcm the College of Education, University cf Idahc, tc the Idaho State Board fcr Vccaticnal Education, Bcise, Idaho. (JK)

BR 6-3014
PA 08
OE/BR

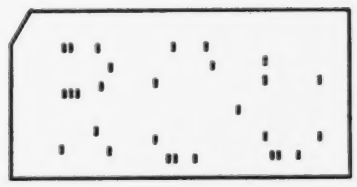
ED034053

FINAL REPORT
Project No. OE-6-3014
Grant No. OEG-4-7-063014-1590

Idaho Research Coordinating Unit for Vocational Education



Dr. Kenneth M. Loudermilk
College of Education
University of Idaho
Moscow, Idaho 83843



August, 1969

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

ED 009688

Final Report

Project No. OE-6-3014
Grant No. OEG-4-7-063014-1590

Idaho Research Coordinating Unit for Vocational Education

Dr. Kenneth M. Loudermilk, Director

College of Education
University of Idaho
Moscow, Idaho 83843

August, 1969

The research reported herein was performed pursuant to Grant No. OEG-4-7-063014-1590 with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

TABLE OF CONTENTS

HEADING	PAGE
SUMMARY	1
INTRODUCTION	1
Historical Perspective	1
Outlook	2
Purposes and Objectives	2
Report Organization	2
METHODS	3
RESULTS: UNIT RESEARCH PROJECTS	4
RESULTS: WORKSHOPS AND CONFERENCES	9
Out-of-State Conferences	9
Vocational Follow-up System	10
Workshop on "Image of the World of Work"	10
Research Training Workshop	12
CONCLUSIONS	14
DISCUSSION AND RECOMMENDATIONS	15
REFERENCES	17

SUMMARY

This is the final report for the Idaho Research Coordinating Unit for Vocational Education. It covers the last 11 months since the preparation of the last interim report, but it also has implications for past accomplishments and the future outlook of the Unit. The major purpose of the Unit was to help maintain and develop all programs of vocational education in Idaho. Four basic objectives were to (1) conduct research, (2) stimulate new research, (3) coordinate research, and (4) provide research consulting services. Progress has been made toward the fulfillment of all purposes and objectives, although much work remains to be done. The Unit engaged in 18 research projects, the results of which were reported in 20 research publications. Several conferences and workshops were held, the most important of which was a workshop for training in methods of vocational research. Several recommendations were stated and discussed relative to the role and function of the Unit. Due to a variety of reasons, but primarily due to the shortage and uncertainty of research funds, the Unit will be moved from the College of Education, University of Idaho to the Idaho State Board for Vocational Education, Boise.

INTRODUCTION

Historical Perspective

The State Occupational Research Unit (also referred to as the Idaho Research Coordinating Unit for Vocational Education, the Idaho RCU, or simply Unit) had its beginning on June 1, 1965. Operations during the first 21 months through February, 1967 were financed under a Federal contract with the U.S. Office of Education. Operations during the next 19 months through September, 1968, were financed by a grant from the U.S. Office of Education.

A proposal submitted April 15, 1968 requested $50,000. per year for five years. This proposal was approved in a letter from the Bureau of Research, U.S. Office of Education early in July, 1968. As late as mid-October, 1968, the Unit Director and others in Idaho felt confident that research funds would be available at least through September, 1973. After passage of the Vocational Education Amendments of 1968, however, some important policy decisions were made within the U.S. Office of Education and elsewhere at the Federal level which had far-reaching effects on all RCUs throughout the United States.

During December, 1968 the Idaho RCU Director was informed that the grant from the U.S. Office of Education to fund the Unit would be terminated at the end of August, 1969. Since the Idaho RCU's yearly funding period ends on September 30, the $50,000. yearly budget was reduced $5,535., or the equivalent of about one month's

operating expenses. Following August 31, 1969 vocational research funds in the various states were to be allocated to the state directors of vocational education.

Since the Vocational Education Amendments of 1968 provided that up to 10 per cent of the basic appropriation could be used for research, it seemed evident that sufficient operating funds would be available to continue the Idaho RCU at or above the current funding level. A major difficulty arose, however, when it became evident that only about $1.1 million would be allocated for research nationwide. Idaho could have expected to receive a little less than $4,000. as its share of this research money--an amount obviously too small to sustain the Idaho RCU at its present functioning level.

Outlook

As of the end of August, 1969, the Unit will have existed four years and three months within the College of Education, University of Idaho, Moscow, Idaho. Due to several reasons--but primarily the shortage of research funds--the Idaho RCU will be moved from its present location and housed in the Idaho State Board for Vocational Education, Boise, Idaho. This relocation of the Unit, reflecting provisions of the Idaho State Plan prepared pursuant to the Vocational Education Amendments of 1968, will be effective September 1, 1969. As this report goes to press, there are reports which indicate that more money for research may be forthcoming from the Federal level. Since this writer is terminating his employment both with the Idaho RCU, and with the University of Idaho, he is unable to speak authoritatively regarding the future of the Unit. Some general observations and comments are included, however, in the closing section of this report entitled DISCUSSION AND RECOMMENDATIONS.

Purposes and Objectives

The proposal prepared and submitted to the U.S. Office of Education on April 15, 1968 stated that the main purpose of the Idaho RCU was to help maintain and develop all programs of vocational education. Four basic objectives were to (1) conduct research related to the vocational education program, (2) stimulate and encourage new research, pilot projects, demonstration projects, and educational innovations, (3) provide research consulting services, and (4) coordinate all research in Idaho pertaining to vocational education. The basic purpose has been fulfilled, at least to some extent, and progress has been made toward each of the four objectives. The work obviously is unfinished, and this writer can only hope that others will continue the work, based on the foundation which has been built up during the past four years and three months.

Report Organization

The content, purposes, and objectives of the proposal submitted on April 15, 1968 are similar to those in the two earlier proposals

which resulted in the initial establishment of the Unit and its continuation after the expiration of the original contract. A final report was prepared for the first 21 months of operation, and an interim report covered the next 19 months (13, 19).* Indeed, the latter interim report contained the entire final report of the first 21 months as an appendix. Thus in one document the highlights were presented of the Unit's accomplishments through early October, 1968. The present report does not repeat the contents of the earlier reports, but rather has a different purpose and emphasis.

The first, and obvious, purpose of this report is to account for developments during the last 11 months. The second purpose is to provide an overview of accomplishments and to examine the possible future role of the Unit in particular, and vocational research in general, in the state of Idaho. The outline suggested for preparing research reports issued by the U.S. Office of Education will be followed, but with minor changes. Those areas already covered in detail in the two earlier reports will be treated only briefly. The section on results is divided into two sections. The first, entitled RESULTS: UNIT RESEARCH PROJECTS, will contain very brief descriptions of all research projects completed or sponsored by the Unit, and their impact or influence, if any, on subsequent research or other educational activities. The second section, entitled RESULTS: WORKSHOPS AND CONFERENCES, will highlight these types of activities during the last 11 months. The title of the last section of this report will be DISCUSSION AND RECOMMENDATIONS.

METHODS

The Unit, during its entire existence, has been a joint effort between the College of Education, University of Idaho, and the Idaho State Board for Vocational Education, Boise. A liaison has been maintained between the Unit and the State Vocational Board which, in a real sense, has provided the framework of purposes and objectives which guided the research and development program. Several details concerning the methods used to carry out the role and function of the Unit are contained in the first final report and in the interim report (13, 19). All methodological efforts may be classified into five general types, as follows.

1. Public Relations. Several well-known methods were used to communicate the activities of the Unit to vocational educators and others in the state. Perhaps the most effective method was contacts with individuals throughout the state who were in positions which seemed to lend themselves to the furtherance of the Unit's purposes and objectives.

---

*Arabic numerals in parentheses correspond with numbered references in the list at the end of this report.

2. Auxiliary Personnel. Several staff members within the Idaho State Vocational Board, and faculty members of the College of Education, University of Idaho (numbering more than 20 persons), devoted a percentage of their total effort to the Unit's program. Several made notable contributions.

3. State Advisory Committee. This Committee, composed of 12 members representing a wide variety of experience and affiliations, helped chart the course of the Unit's research and development program. A total of seven meetings were held during the life of the Unit, two of which were in November, 1968, or within the last year.

4. News Bulletins. The Unit began issuing a monthly news bulletin in October, 1965, about four months after its inception in June. There were 26 monthly issues through November, 1967. The bulletin then was changed to a quarterly publication, and from January, 1968 through July, 1969, seven issues were prepared and released.

5. Research Projects. The Unit completed or sponsored 18 research projects which were reported in 20 separate publications. Specific methodological details thus were included in these reports.

The next major section of this report is concerned with the research projects completed or sponsored by the Unit, either singly or in cooperation with other individuals, agencies, institutions, and organizations.

RESULTS: UNIT RESEARCH PROJECTS

Since almost all of the Unit's research efforts have resulted in a written report, it is not necessary to include any more than a minimum of detail in the present report. Moreover, the first final report and the interim report (13, 19) contained brief summaries of each project. It seems most appropriate in the present report to list each of the 18 projects, and to provide information regarding what, if any, use was made of the findings, or any further research and development activities which seemed to result from the project. The title of each study will be given in truncated form; the exact title and other pertinent data (including ERIC ED numbers) are given in the list of references at the end of this report. Interested readers may obtain copies through the ERIC system, or request copies from the College of Education, University of Idaho. These projects are listed generally in the order in which they were conceived and initiated.

1. Bibliography of Idaho Publications (12). During the summer of 1965, a large number of publications (all that could be located) were assembled which had any apparent relationship to the Idaho economy and/or the field of vocational-technical and practical arts education. The list was published as an annotated bibliography in the November, 1965 issue of the Unit's news bulletin. Requests for

copies continued to come in for several years. The monthly bulletin continued the listing by announcing new publications of interest.

2. Study of the Lumber Industry (6, 7, 8). The Unit Director, in initiating this study, realized that there was little precedent in Idaho for training programs specifically designed for lumbering occupations. Since the Vocational Education Act of 1963 was broad in scope, and lumbering was a basic industry in Idaho, the study seemed justified to move closer to the ideal of serving "persons of all ages in all communities of the state."

This study had no visible impact on vocational education in Idaho. In fact, there were several negative reactions, for reasons that never were entirely apparent. There were values, however, which accrued mainly to the Unit Director. This research was an extension of the Director's doctoral research, and the main findings of this thesis research were published in a professional journal (23), as well as in a Unit publication (7). Another value was that the Unit Director was invited (on his own time) to teach a course in industrial psychology to management personnel of Potlatch Forests, Inc., Lewiston, Idaho. The course was one of a management training series sponsored by Continuing Education at the University of Idaho.

3. Idaho Population Projections (2). This report, published separately by the Department of Social Sciences, University of Idaho, presented population projections and related vital statistics for Idaho from 1960 to 1980. A number of copies have been distributed and used in a variety of contexts. It is not apparent that much use has been made of this research in the vocational area.

4. Psychological Literature Survey--Non-Professional Occupations (11). The professional literature, including test manuals, was surveyed relative to the characteristics of persons likely to succeed and remain in various occupations. The study was intended to be very general, and to serve as a basis for later research projects in test validation and career choice and development. Four subsequent studies of the Unit (see numbers 13, 14, 16, and 17 below), derived from the work completed in this study.

5. Industrial Employment Trends (14). Employment in Idaho industries 1950 through 1964 was reviewed and analyzed. New and expanding industries were identified, and efforts were directed toward the stimulation of research and development activities in these industries. Unfortunately, these efforts produced very little.

6. Nursing in Idaho (9). Hospitals and licensed nursing homes were contacted by mail questionnaire to obtain factual data on employment characteristics of nurses, their working conditions, and other related information. Although such cause-effect relationships are difficult to establish, it seemed that this study had some immediate effects, such as improving the pay of nurses and some

changes in their conditions of work. About this same time the Department of Employment, State of Idaho (22) conducted a study of medical and health occupations which supplemented and extended the Unit's study of nursing. More recently, the Western Interstate Commission for Higher Education (21) conducted a valuable study of nursing in Idaho.

7. Agriculturally-Related Occupations (18). The terms non-farm and off-farm also are used to designate those occupations which are not agricultural, but which are related to the extent that agricultural training and experience are either necessary or at least desirable. There were two main areas of focus during data collections, one in southeastern Idaho and the other in southwestern Idaho. The results of this study, combined with information from other sources, led to the organization of programs in farm equipment mechanics in both areas of the state. Since the main emphasis of the Unit's study was the identification of agriculturally-related occupations, it was expected that others in Idaho would build upon this study and develop educational programs specifically for this group of occupations. It seems evident that very little work has been completed which can be traced directly to the Unit's study. A different kind of benefit accrued to the Assistant Director of the Unit. Mr. Robert W. Richman prepared two articles based in part on this study, both of which were accepted and published in Agricultural Education (24, 25).

8. Chemical Technology Study (5). This study to determine the employment potential for chemical technologists in northern Idaho was conducted mainly as an assist to the emerging area vocational school at Lewis-Clark Normal School, Lewiston, Idaho. A secondary purpose was to develop a model for similar studies of other occupations. No subsequent studies or developmental activities can be traced directly to this study.

9. Training for the Handicapped (10). Training and employment opportunities for the handicapped have been the objects of much publicity, and research and development efforts, for more than a quarter of a century. This background of emphasis was one main reason the Unit conducted this study of training and employment opportunities in Idaho. The report which resulted generated considerable interest. On one occasion, a representative of the State Vocational Rehabilitation Service requested 50 copies for distribution. No other developments can be traced so directly to this project. It seems significant, however, that nationwide emphasis will continue, as the Vocational Education Amendments of 1968 make specific provisions for the handicapped.

10. Vocational Student Follow-up (4). This follow-up study of students formerly enrolled in three vocational programs at the area vocational school in Coeur d'Alene, Idaho was intended primarily as a model for other similar studies in the state. Additional studies were conducted at the Coeur d'Alene school which were patterned after the original study. Similar follow-ups, although using a

different pattern and approach, were conducted at two other area vocational schools in Idaho. More recently, a committee was appointed to develop a statewide follow-up system for vocational students (see under the second side heading of the next major section of this report).

11. High School Vocational Interest Survey (15). The feasibility of an area vocational school in southwestern Idaho prompted several studies of such factors as labor market conditions and enrollment potential. One of these was a study conducted by the Unit of the vocational education interests and aspirations of several thousand high school students. The results of this study generated some interest, and even some controversy, but no tangible results were forthcoming in respect to vocational education programs. Since the first study was done rather hastily, a second study, with markedly improved questionnaires, was conducted some months later. Due to several reasons, financial and otherwise, the results of this second study have had no use whatsoever.

12. High School Graduate Follow-up (3). The second proposal, dated June 14, 1966, was submitted to the U.S. Office of Education for continuation of the Idaho RCU. A portion of this proposal requested separate funds for a follow-up study of graduates of the Pocatello and Idaho Falls high schools in southeastern Idaho. This study, sub-contracted to the Pocatello school district, was the most comprehensive single study sponsored by the Unit. The Unit Director was involved in the study to a considerable extent. A researcher in the Pocatello high school, who also used part of the results as a master's thesis at Idaho State University, Pocatello (26) was assigned full-time to the project. More than $17,000. in Federal funds alone were expended; local contributions in cash, and in professional and clerical staff time and effort, increased the total cost to $25,000. or more.

The benefits derived from this study were realized mainly by the two schools involved. Contacts with the superintendents revealed several developments which could be attributed to the follow-up study. One or both of the schools reported an increase in their vocational offerings, team teaching, and efforts to make subjects like social studies and English more practical. Both schools reported changes in their guidance programs, including a workshop for counselors in one school. A faculty member of one school has initiated a master's thesis project on evaluation of the school's counseling and guidance program. Some use was made of the follow-up questionnaire by the Educational Survey and Planning Services, College of Education, University of Idaho, in school surveys within Idaho. The analyses of the results, however, were much less extensive than in the study sponsored by the Unit at Pocatello and Idaho Falls.

13. Review of Vocational Appraisal Instruments (16). During the summer of 1966, the Unit Director initiated test validation studies, mainly with the General Aptitude Test Battery, at two of Idaho's

area vocational schools. As time went by, it became evident that a study wider in scope would be desirable. Consequently, the study was expanded to a review and synthesis of all research in Idaho relevant to the use of instruments for vocational guidance, selection, and placement. Since the report for this study was completed during the spring of 1969, the study perhaps has not had sufficient time to make its full impact. Several counselors in Idaho have felt a real need for research on instruments used to appraise vocational students, and it is likely that further studies will be forthcoming.

14. Vocational Student Characteristics (20). The differentiation of occupational groups by interest inventories and other similar instruments has a long history in psychological research. This study was concerned with the differentiation of students in several vocational programs in Idaho's area vocational schools. It was possible to relate this study to a much larger project in the state of California, and is the only study of the Unit involving interstate cooperation. Since this was a theoretical study, involving the use of complex statistical analyses, it may not have much immediate use in Idaho. The former assistant director of the Unit, Robert W. Richman, intended to use a portion of this research as a doctoral thesis in guidance and counseling at the University of Idaho. Due mainly to a busy work schedule, he has not yet completed this research.

15. Vocational Program Change (17). This was a theoretical study which tested a theory of administrative change in relation to vocational education programs in Idaho secondary schools. Dr. Robert Heger, formerly a research fellow with the Unit, conducted this study as his doctoral thesis in school administration at the University of Idaho. Dr. Heger has found some use for several copies of his study in his work in California. This writer is not aware of any additional research studies which have followed the initial effort. A recent communication from Dr. Heger revealed that, during the 1969-70 academic year, he will be Director of the Regional Occupational Center, Fremont Unified School District, Fremont, California. Perhaps the experience he gained in the Unit will begin to pay some real dividends.

16. Career Choice--Mining Engineer (1). Former research fellow E. Thomas Cain II completed this study as a doctoral thesis in school administration at the University of Idaho. Several propositions from Super's theory of vocational choice were selected and hypotheses derived in relation to the acceptance or rejection of mining engineering as a possible choice of career. Since the study was completed early in 1969, it is too early to evaluate its impact. Both Dr. Cain and Dr. John Hoskins, Professor of Mining Engineering at the University of Idaho, have expressed their intention to prepare articles for publication in professional journals. The study should serve as a model for studies which are designed to investigate choice or rejection of programs of vocational education and related career objectives.

17. Comparative Test Validation Study (in progress). This study was sub-contracted to Kenneth Armstrong, a doctoral student in guidance and counseling at the University of Idaho. It is a comparative validation of three test batteries--the General Aptitude Test Battery, the Differential Aptitude Tests, and the Iowa Tests of Educational Development--against criteria of success in several programs in Idaho area vocational schools. Preliminary results indicate that other measures of student ability should be used in addition to, or instead of, the General Aptitude Test Battery. The thesis should be completed during the 1969-70 academic year.

18. Educational-Occupational Orientation and Choice (in progress). This was another study sub-contracted to a doctoral student, Fred McCabe, majoring in guidance and counseling at the University of Idaho. The main purpose was to determine if characteristics of successful male vocational-technical students at the post-secondary level could be identified and differentiated from (1) successful male four-year college students, and (2) successful male students who enter employment immediately after high school graduation. The basic data are those available to counselors in the students' high school cumulative record folders. The study should have important implications for student guidance, selection, and placement. The thesis should be completed during the 1969-70 academic year.

This completes a brief overview and evaluation of all research completed by the Unit during its existence of a little over four years. The writer tried to stay on the conservative side in his claims for the impact of these research projects, and the uses made of the results. An area of influence not mentioned previously is the use made of several of the reports in other states. About half of the 20 written reports (see list of references) have been included in the ERIC system. The Unit's staff members have received compliments on several studies during in-state and out-of-state conferences, and numerous mail requests have been received for copies of the research reports. Perhaps it is safe to say that the work completed to date is at least a suitable foundation upon which a future research program may be built.

RESULTS: WORKSHOPS AND CONFERENCES

The contents of this section fall logically under four headings. First, the list of out-of-state conferences attended by the Unit staff will be brought up to date. Second, the Unit participated with the Idaho State Board for Vocational Education in the developmental stages of a follow-up system for vocational students in Idaho. This work is described briefly. The third and fourth headings set off descriptions of two workshops which were sponsored under the RCU Discretionary Award Program.

Out-of-State Conferences

The following conferences were attended by one or more members

of the Unit.

--Follow-up Seminar on Project "Image of the World of Work," Sponsored by the Rocky Mountain Educational Laboratory of Greeley, Colorado, and held at Park City, Utah, November, 1968.

--The 62nd Annual Convention of the American Vocational Association, Dallas, Texas, December, 1968.

--Annual Conference of RCU Personnel, Salt Lake City, Utah, March, 1969.

--Region VIII Clinic on the Vocational Education Amendments of 1968, Denver, Colorado, April, 1969.

Vocational Follow-up System

Requirements of reporting on programs of vocational education and the necessity of evaluation prompted the State Vocational Board Director, Roy Irons, to appoint a committee to establish a follow-up system for Idaho. This committee was co-chaired by the Assistant State Vocational Board Director, William Swenson, and the Director of the Idaho RCU, Kenneth M. Loudermilk. There were six additional members of the committee, representing the five operating area vocational schools, employed in counseling and administrative positions.

Due to an increased workload preparing for the implementation of the Vocational Education Amendments of 1968, the committee members were unable to convene for a meeting until several months had passed. The meeting was held at the University of Idaho at mid-April, 1969. An overall plan for a follow-up system was worked out, and several content items were written for a mail questionnaire. Heavy work schedules again prevented additional meetings. Moreover, it was decided that, until Federal reporting requirements under the new Amendments were clarified, the follow-up system should not be finalized. It is expected that the follow-up system can be brought to completion and implemented during the 1969-70 academic year.

Workshop on "Image of the World of Work"

The Rocky Mountain Educational Laboratory, Greeley, Colorado, sponsored this project which was tested during the 1968-69 academic year in 11 pilot schools in the eight-state area served by the Lab. It was designed to develop favorable attitudes on the part of students at the 7th grade level, mainly through social studies and language arts classes, which would transfer to later vocational and employment objectives. The Unit Director served as a resource consultant on this project, and maintained contact with the Meridian Junior High School, Meridian, Idaho during the 1968-69 academic year. The Meridian school was the only one of the 11 pilot schools located in Idaho.

As a result mainly of the interest shown by the Meridian school

administration and faculty, a one-week workshop was held June 9-13 to review the past year's activities and to make plans for the 1969-70 school year. The workshop was organized so that several resource persons would present on a variety of topics, and that the participants also would have time for work sessions in which to share ideas and to formulate plans for the new year. The resource person from the Unit, and also the sponsor of the workshop, was the Director, Dr. Kenneth M. Loudermilk. Others who gave formal presentations were:

Dr. Charles Neidt, Director, Human Factors Research Laboratory, Colorado State University, Fort Collins, Colorado

Mr. Larry Horyna, Project Assistant, Rocky Mountain Educational Laboratory, Greeley, Colorado

Mr. Elwyn DeLaurier, Director, Pupil Personnel Services, State Department of Education, Boise, Idaho

Mrs. Ella Hilverda, Director of Guidance Services, Kimberly High School, Kimberly, Idaho

The workshop participants were:

Mr. K.D. Hartwell, Principal, Meridian Junior High School

Mrs. Opal McConnel, Librarian

Mr. Glenn Hughes, Guidance Counselor

Mrs. Maxine Stewart, 7th Grade Social Studies and English

Mrs. Mary Cline, 7th Grade Reading and English

Mrs. Frances Goodland, 7th Grade and 8th Grade Reading

Mrs. Leona Tucker, 7th Grade Reading and English

Mr. Carl Waite, 7th Grade Social Studies and English

Miss Loeta Wilson, 7th Grade Social Studies and Science

Miss LeAnn Ross, Secretary

The overall research design of the project was reviewed early in the week. Following this, a representative from the Rocky Mountain Educational Laboratory reviewed lesson plans from several of the project schools. The week ended with some emphasis on educational and vocational guidance, and how the Image project might be related to these aspects of the school program. Plans for the forthcoming school year were (1) to repeat the project with the new class of 7th graders, but with a little more occupational emphasis, and (2) to place increased emphasis on occupations and to begin vocational guidance toward broad fields of work at the 8th grade

level. As this report goes to press, it is uncertain if sufficient research funds will be available to continue the project. Similar to the Idaho RCU, the Rocky Mountain Educational Laboratory did not receive sufficient funds to continue present operations after August 31, 1969.

Research Training Workshop

The Unit staff had considered for several years the possibility of sponsoring a research training workshop for vocational education personnel in Idaho. The kind of workshop finally held during the spring and summer of 1969, and briefly described here, should have been held at least three years earlier in the summer of 1966. The Idaho RCU staff could not, however, generate sufficient interest and support to make the effort worthwhile. It is to the credit of the new State Vocational Director, Roy Irons, that he, in the spring of this year, gave his support to a research workshop. Mr. Irons further encouraged the administrators of the area vocational schools to select persons from their faculties to attend the workshop.

The workshop was characterized by an important developmental strategy. First, on June 18 and 19, several administrative and research personnel from the State Vocational Board and the area vocational schools met at the University of Idaho for a pre-session workshop. The objectives were to orient them to the research process and to identify research priorities. Each participant also was requested to return home and further establish research priorities through contacts with his or her own staff and colleagues. Second, the workshop *per se* ran two weeks, July 21 through August 1, and is described here only briefly. The third highlight occurred on July 30, near the end of the two-week workshop. State Vocational Board Director Roy Irons and directors or assistant directors of all area vocational schools in Idaho attended the workshop for a special session. The workshop participants reported on research proposals they had developed. The director and coordinator of the workshop, Dr. Allen Lee, gave an overview of the research process, how it related to the important area of program evaluation, and how the individual proposals of the participants fit into this overall paradigm or model. This research paradigm which emerged during the workshop was the fourth major development, and is described in the last paragraph of this section.

The following two individuals were responsible for organizing and conducting the workshop.

Dr. Allen Lee, Research Professor, Teaching Research Division, Oregon State System of Higher Education, Monmouth, Oregon

Dr. Kenneth M. Loudermilk, Director, State Occupational Research Unit, College of Education, University of Idaho, Moscow, Idaho

The following 11 individuals participated in the two-week workshop.

The title of the research proposal each developed during the workshop, either individually or in cooperation with other workshop participants, also is included.

Frank Herbert, Coordinator, High School Programs, College of Southern Idaho, Twin Falls, Idaho. Proposal: "Analysis and Appraisal of Existing Secondary Exploratory Vo-Tech Programs"

Kenneth Hansen, Assistant State Supervisor, Agricultural Education, Idaho State Board for Vocational Education, Boise, Idaho. Proposal: "Development of Criteria and Procedures for Implementing an Evaluation of Vocational-Technical Programs in Idaho"

Len Brenchley, Counselor, Vo-Tech Division, Idaho State University, Pocatello, Idaho. Proposal: "The Identity and Status of the Non-Admitted Students of Area Vocational-Technical Schools in the State of Idaho"

Erma Callies, Counselor, Vo-Tech Division, Boise State College, Boise, Idaho. Proposal: "An Evaluation of Women's Vocational-Technical Programs in Idaho"

Antoinette Webster, Researcher, Vo-Tech Division, Idaho State University, Pocatello, Idaho. Proposal: "Success of Physically Handicapped Persons Who Have Completed Vocational-Technical Programs in Finding and Holding Jobs"

LaMar Edrington, Coordinator of Related Information, Vo-Tech Division, College of Southern Idaho, Twin Falls, Idaho. Proposal: "Development of a Systems-Oriented Model for Attaining Meaningful Vocational Curricula in Community Colleges"

Richard Tracy, Instructor, Auto Mechanics, Skyline High School, Idaho Falls, Idaho. Proposal: "Procedures for Identifying High School Dropouts in High School and Determining the Implications for Vocational-Technical Education"

Wayne Rodgers, Director, Idaho Falls Area Vocational-Technical Center, Idaho Falls, Idaho. Proposal: "The Development of a Pre-Service Teacher Training Program for Trade and Technical Instructors in the State of Idaho"

Ralph Osborn, Counselor, Lewis-Clark Normal School, Vo-Tech Division, Lewiston, Idaho. Proposal*

Larry Lannigan, Assistant Director, Area Vocational School, Lewis-Clark Normal School, Lewiston, Idaho. Proposal*

Dale Parsons, Vocational Counselor, North Idaho Junior College, Vo-Tech Division, Coeur d'Alene, Idaho. Proposal*

*Proposal (prepared jointly by Osborn, Lannigan, and Parsons):

"A Five-Year, Four-Phase Plan for the Development of a Uniform Follow-up System For Use in the Post-Secondary Vocational-Technical Schools of Idaho"

The State Vocational Board Director and the area school administrators formed a reaction panel at the meeting on July 30. Each panel member gave his reactions to the presentation by Dr. Allen Lee and the individual research proposals presented by the workshop participants. The panel members seemed satisfied with what had been accomplished. Moreover, they pledged their full support to research efforts in the area vocational schools, to the extent this will be possible with the limited research funds available.

The paradigm which emerged during the workshop was fairly simple in structure, but also broad in its implications. It took form as a kind of "double-domed umbrella," with component parts representing important phases of the entire research and development process. The uppermost dome of the umbrella was labeled "Evaluation," which, in a broad sense, embraces and overshadows all activities in vocational-technical and practical arts education. Immediately below the first dome was a second dome, essentially equal in size, which was labeled a "Statewide Information System." Many researchers do not consider information gathering as research, but probably most would agree that the collection of complete and accurate information is a necessary and basic step in the research process. The ribs of the double umbrella were likened to the individual research proposals developed during the workshop, and to other similar research proposals which would support and sustain the all-embracing domes of Evaluation and the Statewide Information System. An important conclusion was that a Research Coordinating Unit was not only needed just for the vocational area, but for the entire system of education in the state. The RCU thus would constitute the center pole of the double umbrella, and would be both the center and the support of the entire structure.

CONCLUSIONS

It may be concluded that the Idaho RCU has made progress toward the fulfillment of its major purpose, and the accomplishment of its objectives. It has helped to maintain and develop, either directly or indirectly, all programs of vocational education in the state. A total of 18 research projects and 20 prior publications reflect a respectable amount of research completed singly and in cooperation with other individuals, agencies, institutions, and organizations. Attempts were made to coordinate all research in Idaho pertaining to the vocational area. Efforts were directed toward the stimulation and encouragement of new research and innovative practices, and some of these efforts were successful. Research consulting services were provided in several instances where this was requested, and in those situations where it seemed congruent with the major purpose and objectives of the Unit.

As the Idaho RCU completes its Federal grant, and moves from the University of Idaho to the Idaho State Board for Vocational Education, it is evident that its work is far from complete. The past four years and three months have been mainly a period of establishment. Only during the last few months has it seemed likely that the Unit could actually begin to make its influence felt on a statewide basis. Unfortunately, the curtailment in research funds has had serious consequences, and is largely responsible for what may prove to be a period of relatively little activity in vocational research in Idaho. This writer, who has directed the Unit during its entire existence, and who now is of necessity entering other employment, can only hope that the Idaho RCU will merely lie dormant until it can again flourish in the warmth and nurture of adequate support and research funding.

DISCUSSION AND RECOMMENDATIONS

That the Idaho RCU should be continued and vocational research expanded is a basic premise of this entire report. It also is evident that a vast amount of work remains and that several improvements are needed if the Unit is to play a meaningful role in Idaho's system of vocational education. It is to this end that five recommendations are directed, and their implications discussed, as this report draws to a close.

Recommendation 1. Professional research personnel should be employed whose main interest and responsibility is the design and conduct of needed research studies. This has been a problem area ever since the formation of the Unit in mid-1965. Perhaps no more than two researchers were employed in all of Idaho's secondary schools. None were employed in the area vocational schools with this function as their major responsibility. Faculty members in several institutions of higher learning had research capabilities, but other responsibilities and other research interests limited severely their availability for the vocational research program. Ten persons, all at the graduate level, were employed by the Unit, but every one of these has left Idaho for more desirable positions elsewhere. Since an important objective of the Unit was to train researchers, it is regretable that Idaho was not able to retain at least a few of those individuals who had first-hand experience with the Unit. Perhaps a beginning has been made in the research workshop held during the summer of 1969. If all or even a part of the workshop participants are given time to do research, the quality and amount of vocational research may begin to trend upward.

Recommendation 2. The Idaho RCU, soon to be moved to the Idaho State Board for Vocational Education in Boise, should be directed by a professional researcher specifically employed for this position. The new State Plan for Idaho seems to indicate that eventually this recommendation will be carried out. During the interim of uncertain research funding, this may not be possible.

The main dangers this writer anticipates is that (1) too much emphasis may be placed on practical or "bread and butter" types of activities and too little on innovative projects that will lead to important changes, and (2) little actual research will result if the responsibility is superimposed on several persons who already have busy schedules. However trite it may sound, research does not appear spontaneously, and needs to be planned and provided for as an integral part of the total program.

Recommendation 3. More emphasis should be placed on research training, both for vocational teachers in preparation and for those already employed in teaching and administrative or related positions. Contacts and observations over the years have revealed to this writer that most vocational educators can be divided into three classes in respect to vocational research. First, there are those who have only a vague understanding of what the term means, and not much inclination to learn more about it. Second, there are those who associate the term with highly theoretical or basic types of research, and therefore see few implications for their everyday work activities. Third, a few seem to appreciate what research might do for them, but due to pressures of time, choose to continue with methods which seem to work and which do enable them to accomplish certain objectives. It should be possible to train most vocational educators to be at least good consumers of research. Moreover, the process should be continued so that new developments can be capitalized on through a kind of "research consciousness" which will facilitate the adoption of proven new methods and materials--and to some extent their creation and development.

Recommendation 4. The preparation and submission of research proposals for research funds outside the state should be encouraged and expanded. Even though research money is scarce at this writing, it seems likely that more will be available in the months and years ahead. Idaho has been very slow in this area of research proposal writing. A check with the Region VIII office in Denver, Colorado, revealed that only four small grant proposals had been submitted from Idaho in over two years, and that only one of these--concerned with teacher mobility--had been funded. Much more activity is needed to take advantage of research funds available from Federal and other sources.

Recommendation 5. Research findings and innovations from other fields of education and from outside Idaho continually need to be monitored, and selectively utilized to improve the state's vocational education system. This last recommendation is vastly important, and underscores the need for a functioning research program in Idaho. Vocational education, as this writer sees it, cannot be clearly separated from other important fields of education. Rather, there can be a healthy interchange with a number of other disciplines, and this to mutual advantage. Concepts from psychology, sociology, and growth and development--to name only three--are quite useful. Vocational behavior in turn has been a fruitful area of study for these three disciplines, and others. Developments nationwide and

elsewhere in the world should not go unnoticed. It should be pointed out, however, that there are dangers inherent in the wholesale adoption of new findings and methods either in another discipline or in a different geographic area without some attention given to their adaptation to a new setting. The latter is an important function of research, and points up the necessity of making research an integral part of vocational education. This kind of healthy interplay between disciplines and geographic areas, combined with the actual production and testing of research findings, would seem to be an adequate foundation upon which a vocational education system could be built to meet the needs of all of our citizens.

REFERENCES

The first 20 references are grouped together for convenience. They are publications which contain the results of research projects conducted by the Idaho RCU, either singly or as a joint effort. The remaining references were cited in this report, and only a few reflect a direct influence of the Unit's research program.

1. Cain, E. Thomas II, "Factors Operative in Curricular and/or Occupational Choice: A Study of Super's Theory," Unpublished Doctor's Thesis in Educational Administration, University of Idaho, Moscow, Idaho, February, 1969.

2. Harmsworth, Harry C. Vital Statistics and Population Projections for Idaho: 1960-1980. Department of Social Sciences, Project No. 106 and Project No. 11, University of Idaho, Moscow, Idaho, August, 1967.

3. State Occupational Research Unit. A Follow-up Study of Pocatello and Idaho Falls High School Graduates (1954-1963). College of Education, University of Idaho, Moscow, Idaho, June, 1967. ERIC ED 012 784

4. _____. A Follow-up Study of Vocational Students at North Idaho Junior College. July, 1967.

5. _____. A Study of Employment Opportunities for Chemical Technologists in Northern Idaho. November, 1966.

6. _____. A Study of the Lumber Industry in Idaho, Part I. February, 1966. ERIC ED 012 326

7. _____. A Study of the Lumber Industry in Idaho, Part II. May, 1966. ERIC ED 012 327

8. _____. A Study of the Lumber Industry in Idaho, Part III. August, 1966. ERIC ED 012 786

9. _____. A Study of the Nursing Profession in Idaho Medical Facilities. January, 1967.

10. _____. A Study of Vocational Training for Mentally and Physically Handicapped. December, 1966.

11. _____. A Survey of Literature Related to Selected Nonprofessional Occupations. May, 1966. ERIC ED 013 915

12. _____. Bulletin of the State Occupational Research Unit. Supplement: Bibliography of Idaho Publications. Number 2, November, 1965.

13. _____. Continuation of the State Occupational Research Unit. Interim Report, Project No. OE-6-3014, Grant No. OEG-4-7-063014-1590, October, 1968. ERIC ED 024 817

14. _____. Employment Trends in Various Idaho Industries 1950-1964. May, 1966.

15. _____. High School Vocational Interest Survey in Canyon County. Summer, 1967.

16. _____. Instruments for Vocational Guidance, Selection, and Placement: A Review and Synthesis of Research in Idaho. March, 1969.

17. _____. Open System Theory and Change in Vocational Programs of Idaho Secondary Schools. February, 1968. ERIC ED 021 138

18. _____. Study of Agriculturally Related Occupations in Selected Counties of Idaho. October, 1967. ERIC ED 016 825

19. _____. The Establishment of a State Occupational Research and Development Coordinating Unit. Final Report, Project No. OE-5-0102, Contract No. OE-5-85-118, March, 1967. ED 010 854

20. Stewart, Lawrence H. A Study of Certain Characteristics of Students and Graduates of Occupation-Centered Curricula. University of California, Berkeley, California. Final Report, Project No. 5-0152, Contract No. OE-6-85-072, U.S. Department of Health, Education, and Welfare, Bureau of Research, Office of Education, June, 1968. ERIC ED 025 264

21. Barton, David M., (Director). Nursing in Idaho: A Study of Nursing Needs and Resources. Idaho Office, Mountain States Regional Medical Program, Western Interstate Commission for Higher Education. Earl Hunsicker, Program Coordinator, Economic Development Internship Program, University East Campus, Boulder, Colorado, January, 1969.

22. Beeman, Addison C., "Occupational Trends in Idaho Hospitals and Licensed Nursing Homes," Idaho State Department of Employment, Boise, Idaho, April, 1967. ERIC ED 016 061

23. Loudermilk, Kenneth M., "Prediction of Efficiency of Lumber and Paper Mill Employees," Personnel Psychology, Vol. 19, Autumn, 1966, pp. 301-310.

24. Richman, Robert W., "A New Term: Agrarian Occupations," Agricultural Education, Vol. 41, July, 1968, pp. 18-19.

25. _____., "An Approach for Conducting Research on Agricultural Occupations," Agric. Educ., Vol. 41, May, 1969, pp. 273 ff.

26. Watson, Larry E., "The Ten-Year Study--A Vertical Follow-Up," Unpublished Master's Thesis, Idaho State Univ., Pocatello, 1967.